

Titration Notes

***titrations are used to determine the concentration of a solution

Setup:

Chemical Formula:



Titration Formula:

$$M_1V_1 = M_2V_2$$

M_1 = concentration of base

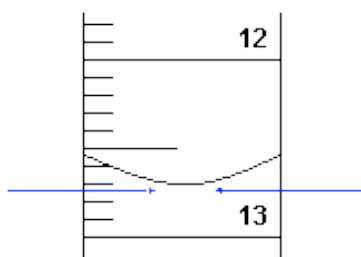
V_1 = volume of base

M_2 = concentration of acid (unknown)

V_2 = volume of acid

Reading a buret:

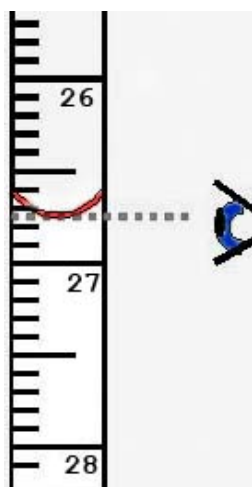
MEASUREMENT WITH A BURET



Read the bottom of meniscus at eye level.

$12.75 \pm 0.01\text{ml}$

Four significant figures



Problems:

You titrate 25.0 mL of acid with 20.32 mL of base. The concentration of the base is 0.200M. What is the concentration of the acid?

You titrate 50.0 mL of acid with 71.11 mL of base. The concentration of the base is 0.100M. What is the concentration of the acid?